

Migrating from Soil Data Viewer 4.1 to Soil Data Viewer 5.0

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Introduction

Soil Data Viewer 5.0 will not work with the same soil database(s) that you may have been using with Soil Data Viewer 4.1. For each soil survey area that you need to work with, you will need to download a new set of tabular soil data, even if the version of that tabular soil data has not changed since you last downloaded data for that survey area. In addition, you are going to have to download an updated soil database (SSURGO template database) that is compatible with Soil Data Viewer 5.0.

Why something other than installing Soil Data Viewer 5.0 has to be done in order to migrate from Soil Data Viewer 4.1 to Soil Data Viewer 5.0

For Soil Data Viewer 4.1, the information that drove the Soil Data Viewer application was distributed with the application itself. Installing the application installed an MS Access database that contained the specifications for aggregating selected soil attributes to the map unit level. These specifications for aggregating selected soil attributes to the map unit level are collectively referred to as the “SDV Rules”.

For Soil Data Viewer 5.0, the SDV Rules are not distributed with the application. For SDV 5.0, the SDV Rules are distributed as part of the tabular soil data. In other words, with the advent of SDV 5.0, whenever the tabular soil data for a survey area is exported from the Soil Data Mart (<http://soildatamart.nrcs.usda.gov>), the appropriate SDV Rules are exported at the same time and bundled with that tabular soil data. When that tabular soil data is then imported into an MS Access SSURGO template database, the corresponding SDV Rules are imported at the same time. This mechanism keeps the SDV Rules in sync with the corresponding tabular soil data, i.e. SDV no longer allows offers to create a thematic map for a soil interpretation that wasn't actually included in the corresponding tabular soil data.

This change means that in order to run Soil Data Viewer 5.0, you must use a SSURGO template database that has been modified to be able to import and store the SDV Rules that are now distributed with the tabular soil data. In addition, the tabular soil data that you import into that database must now include the SDV Rules needed to drive the Soil Data Viewer application.

When Soil Data Viewer 5.0 was released, the Soil Data Mart was updated to:

1. Export the appropriate SDV Rules when the tabular soil data for a survey area is exported.

2. Provide updated SSURGO template databases for use with Soil Data Viewer 5.0. A SSURGO template database must be at version 32 or later to work with Soil Data Viewer 5.0.

This means that if you are using a SSURGO template database with a version prior to 32, at a minimum you will need to request a new export of tabular soil data for each of the survey areas contained in that database, and you will also need to download a SSURGO template database at version 32 or later.

Determining the version of a SSURGO template database

To determine the version of an existing SSURGO template database, open that database in MS Access. When that database is opened, either the SSURGO Import form or the Soil Reports form should be displayed. The current version of that database is displayed in the title bar of either of those forms. The template database version is also available in the report titled “How to Understand and Use this Database”, near the end of that report.

Determining if a survey area’s spatial soil data needs to be updated

If the spatial soil data for a survey area hasn’t been updated since you last downloaded data for that survey area, you only need to request a new export for that survey area’s tabular data. But you should either verify that the spatial soil data has not been updated since you last downloaded data for that survey area, or you should just go ahead and request a new download that includes both spatial and tabular data.

If you do want to determine if a survey area’s spatial soil data has been updated since you last downloaded data for that survey area, here is the process. These instructions assume that you already have ArcGIS installed.

1. The most definitive way to determine the spatial version of a set of spatial soil data is to load one of the spatial feature classes for the survey area in question into ArcMap. If you have spatial soil data for a survey area, the map unit polygon feature class should always be available.
2. After loading the map unit polygon feature class for the survey area in question into ArcMap, right click that layer’s name in the ArcMap Table of Contents frame and then select “Open Attribute Table”.
3. After opening the attribute table, look for the value in the column titled “spatialver”. That value is the version of that spatial data.

4. Next, using you Web browser, access the Soil Data Mart at <http://soildatamart.nrcs.usda.gov> and navigate as necessary to select the survey area in question.
5. After selecting the survey area in question from the Select Soil Survey Area page, click the button labeled “Download Data” on that page.
6. Near the top of the Download Data page, 3 version numbers are displayed. Compare the spatial version of your local spatial soil data with the spatial version displayed on the Download Data page. If the spatial version on the Download Data page is greater, you will need to download both spatial and tabular data for that survey area. The good news is that you are already exactly where you need to be to do so.

Again, if you don’t want to deal with the process of determining if your local spatial soil data is current, when you request the tabular soil data for a survey area, just go ahead and include the corresponding spatial soil data, if spatial soil data is available for that survey area. Doing this ensures that the tabular and spatial soil data for a survey area are in sync.

Downloading the appropriate SSURGO template database

When you download data from the Soil Data Mart, a default SSURGO template database is automatically selected for you. The default template database is the one in the grid of available template databases that is highlighted when the Download Data page loads. If a state customized template database exists for the state in which the survey area in question resides, that state’s custom template database will be selected in lieu of the national template database. You need to verify that any state custom template database is based on a national template database at version 32 or later. Look at the value in the column titled “Template DB Version”. You should see a value of 32 or greater somewhere within that string.

Soil Data Viewer 5.0 was released in mid October of 2005. At that point in time, the only version 32 SSURGO template database available was the national template database. It will take states some time to apply their customizations to version 32 of the national SSURGO template database.

Therefore, when you download data from the Soil Data Mart for a survey area in a state that has a custom template database, don’t assume that the database selected by default is at version 32 or later. If your export included a template database that wasn’t at version 32 or later, or if your export didn’t include a template database to begin with, you can always download a national template database at version 32 or later without having to

request data for a survey area a second time. A template database can be downloaded independent of soil data at <http://soildatamart.nrcs.usda.gov/Templates.aspx>. The national SSURGO template databases are always at the top of the list of available template databases. For a national SSURGO template database, the column titled “State” contains “US”.